

CLAIMS

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1. An apparatus for generating electrical energy, comprising a rotor (20) with at least one coil (22), stator (10) with at least one magnet (11) and at least one electrical consumer (23), characterised in that the at least one electrical consumer is located on the rotor and is connected to the at least one coil.
2. The apparatus according to Claim 1, characterised in that it is designed as a windmill and the rotor is provided with blades (21).
3. The apparatus according to Claim 1 or 2, characterised in that at least one light-emitting diode (LED) is used as the consumer.
4. The apparatus according to Claim 3, characterised in that at least two light-emitting diodes are connected anti-parallel to one another.
5. The apparatus according to one of Claims 1 - 4, characterised in that the at least one magnet is a permanent magnet.
6. The apparatus according to one of Claims 1 - 5, characterised in that the at least one permanent magnet is mounted on a disk (13) comprising magnetic material.
7. The apparatus according to one of Claims 1 - 6, characterised in that several magnets are distributed uniformly around the circumference of the stator with respect to its axis and are preferably arranged with matching polarity (NNNN) relative to this axis.

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Sub
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8. The apparatus according to one of Claims 1 - 5, characterised in that the at least one coil has an air gap winding or an iron-free winding.
9. The apparatus according to one of Claims 1 - 9, characterised in that the at least one coil is mounted on a disk made from a magnetic material (25).
10. The apparatus according to one of Claims 1 - 9, characterised in that the rotor is supported on a pin (12) of the stator.
11. The apparatus according to one of Claims 1 - 10, characterised in that several series-connected coils (A-D) distributed uniformly over the circumference of the rotor are provided and that several consumers (a-d) constructed as light-emitting diodes are connected to these coils such that a first of the consumers (e.g. a) sees the voltage generated in series in at least two of the coils (e.g. A - D) and a second consumer (e.g. b) sees a voltage generated in series in at least one coil fewer (e.g. B - D).

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